

**In the Claims:**

This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (Currently Amended) A system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest, comprising:

a selector for identifying at least one substance of interest;

a profiler for selecting from multiple profiles related to safety of the at least one substance of interest, using at least one filter to determine at least one set of cases;

at least one data mining engine for processing the at least one set of cases determined and submitted by the at least one filter; and

an output device for displaying analytic results from the data mining engine.

2. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the at least one data mining engine is a proportional analysis engine to assess deviations in a set of reactions to the at least one substance of interest.

3. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the data mining engine is a comparator to measure reactions to the at least one substance of interest against a user-defined backdrop.

4. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the data

mining engine is a correlator to look for correlated signal characteristics in drug/reaction/demographic information.

5. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the data mining engine is at least two members of the group consisting of a proportional analysis engine, a comparator, and a correlator.

6. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the substance of interest is assessed in combination with other drugs, foodstuffs, beverages, nutrients, vitamins, toxins, chemicals, hormones, and supplements.

7. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 1, wherein the system permits assessment and analysis of risks of adverse effects resulting from use of at least one substance of interest in any of multiple dimensions of risk assessment and analysis.

8. (Currently Amended) A system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest, comprising:

a selector for identifying at least one drug of interest;

a profiler for selecting from multiple profiles related to safety of the at least one drug of interest, using at least one filter to determine at least one set of cases;

at least one data mining engine for processing the at least one set of cases determined  
and submitted by the at least one filter; and  
an output device for displaying analytic results from the data mining engine.

9. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the at least one data mining engine is a proportional analysis engine to assess deviations in a set of the reactions to the drug of interest.

10. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the data mining engine is a comparator to measure reactions to the drug of interest against a user-defined backdrop.

11. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the data mining engine is a correlator to look for correlated signal characteristics in drug/reaction/demographic information.

12. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the data mining engine is at least two members of the group consisting of a proportional analysis engine, a comparator, and a correlator.

13. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the drug of interest is assessed in combination with other drugs, foodstuffs, beverages, nutrients, vitamins, toxins, chemicals, hormones, and supplements.

14. (Previously Presented) The system for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 8, wherein the system permits assessment and analysis of risks of adverse effects resulting from use of at least one drug of interest in any of multiple dimensions of risk assessment and analysis.

15. (Currently Amended) A method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest, comprising:

identifying the at least one substance of interest;

selecting a profile of the at least one substance of interest related to safety of the at least one substance of interest, using at least one filter to determine at least one set of cases;

analyzing risks of adverse effects resulting from use of the at least one substance of interest using at least one data mining engine for processing the at least one set of cases determined and submitted by the at least one filter; and

displaying results from analyzing risks of adverse effects resulting from the use of the at least one substance of interest.

16. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 15, wherein the at

least one data mining engine is a proportional analysis engine to assess deviations in a set of the reactions to the at least one substance of interest.

17. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 15, wherein the at least one data mining engine is a comparator to measure reactions to the at least one substance of interest against a user-defined backdrop.

18. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 15, wherein the at least one data mining engine is a correlator to look for correlated signal characteristics in drug/reaction/demographic information.

19. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 15, wherein the data mining engine is at least two members of the group consisting of a proportional analysis engine, a comparator, and a correlator.

20. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 18, wherein the at least one substance of interest is assessed in combination with other drugs, foodstuffs, beverages, nutrients, vitamins, toxins, chemicals, hormones, and supplements.

21. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one substance of interest according to Claim 18, wherein the method permits assessment and analysis of risks of adverse effects resulting from use of at least one substance of interest in any of multiple dimensions of risk assessment and analysis.

22. (Currently Amended) A method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest, comprising:

identifying the at least one drug of interest, as well any other drugs, nutrients, supplements, and other substances;

selecting a profile of the at least one drug of interest related to safety of the at least one drug of interest, using at least one filter to determine at least one set of cases;

analyzing risks of adverse effects resulting from use of the at least one drug of interest using at least one data mining engine for processing the at least one set of cases determined and submitted by the at least one filter; and

displaying results from analyzing risks of adverse effects resulting from the use of the at least one drug of interest.

23. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the at least one data mining engine is a proportional analysis engine to assess deviations in a set of the reactions to the at least one drug of interest.

24. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the at least one data mining engine is a comparator to measure reactions to the at least one drug of interest against a user-defined backdrop.

25. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the at least one data mining engine is a correlator to look for correlated signal characteristics in drug/reaction/demographic information.

26. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the data mining engine is at least two members of the group consisting of a proportional analysis engine, a comparator, and a correlator.

27. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the at least one drug of interest is assessed in combination with other drugs, foodstuffs, beverages, nutrients, vitamins, toxins, chemicals, hormones, and supplements.

28. (Previously Presented) The method for assessing and analyzing risks of adverse effects resulting from use of at least one drug of interest according to Claim 22, wherein the method

permits assessment and analysis of risks of adverse effects resulting from use of at least one drug of interest in any of multiple dimensions of risk assessment and analysis.